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Applicant HÄLIKKÄ, Antero et al	

- made before the expiration of 19 months from the priority date or, where Rule 32 applies, within the time limit under Rule 32.2(b).

<p>The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland</p> <p>Facsimile No.: (41-22) 740.14.35</p>	<p>Authorized officer</p> <p>F. Baechler</p> <p>Telephone No.: (41-22) 338.83.38</p>
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REQUEST

The undersigned requests that the present international application be processed according to the Patent Cooperation Treaty.

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International Application No. **PCT/FI 00 / 00606**

International Filing Date **03 JUL 2000 (03-07-2000)**

The Finnish Patent Office
PCT International Application
Name of receiving Office and "PCT International Application"

Applicant's or agent's file reference
(if desired) (12 characters maximum)

Box No. I TITLE OF INVENTION

Method for remote directing of www-browser

Box No. II APPLICANT

Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.)

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☐ the United States of America only

☐ the States indicated in the Supplemental Box

Box No. III FURTHER APPLICANT(S) AND/OR (FURTHER) INVENTOR(S)

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☐ all designated States except the United States of America

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Box No. IV AGENT OR COMMON REPRESENTATIVE; OR ADDRESS FOR CORRESPONDENCE

The person identified below is hereby/has been appointed to act on behalf of the applicant(s) before the competent International Authorities as:

☐ agent

☐ common representative

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Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.)

This person is:

- ☐ applicant only
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This person is:

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Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.)

This person is:

- ☐ applicant only
☐ applicant and inventor
☐ inventor only (If this check-box is marked, do not fill in below.)

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☐ Further applicants and/or (further) inventors are indicated on another continuation sheet.

Box No.V DESIGNATION OF STATES

The following designations are hereby made under Rule 4.9(a) (mark the applicable check-boxes; at least one must be marked):

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National Patent (if other kind of protection or treatment desired, specify on dotted line):



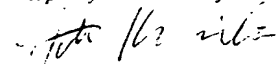
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Box No. VI PRIORITY CLAIM		<input type="checkbox"/> Further priority claims are indicated in the Supplemental Box.		
Filing date of earlier application (day/month/year)	Number of earlier application	Where earlier application is:		
		national application: country	regional application: regional Office	international application: receiving Office
item (1) (07.07.99) 07 July 1999	991557	FI		
item (2)				
item (3)				
<input checked="" type="checkbox"/> The receiving Office is requested to prepare and transmit to the International Bureau a certified copy of the earlier application(s) (only if the earlier application was filed with the Office which for the purposes of the present international application is the receiving Office) identified above as item(s): (1)				
<i>* Where the earlier application is an ARIPO application, it is mandatory to indicate in the Supplemental Box at least one country party to the Paris Convention for the Protection of Industrial Property for which that earlier application was filed (Rule 4.10(b)(ii)). See Supplemental Box.</i>				
Box No. VII INTERNATIONAL SEARCHING AUTHORITY				
Choice of International Searching Authority (ISA) (if two or more International Searching Authorities are competent to carry out the international search, indicate the Authority chosen; the two-letter code may be used):		Request to use results of earlier search; reference to that search (if an earlier search has been carried out by or requested from the International Searching Authority): Date (day/month/year) Number Country (or regional Office)		
ISA / SE				
Box No. VIII CHECK LIST; LANGUAGE OF FILING				
This international application contains the following number of sheets: request : 4 description (excluding sequence listing part) : 3 claims : 1 abstract : 1 drawings : 2 sequence listing part of description : Total number of sheets : 11		This international application is accompanied by the item(s) marked below: 1. <input checked="" type="checkbox"/> fee calculation sheet 2. <input type="checkbox"/> separate signed power of attorney 3. <input type="checkbox"/> copy of general power of attorney; reference number, if any: 4. <input type="checkbox"/> statement explaining lack of signature 5. <input type="checkbox"/> priority document(s) identified in Box No. VI as item(s): 6. <input type="checkbox"/> translation of international application into (language): 7. <input type="checkbox"/> separate indications concerning deposited microorganism or other biological material 8. <input type="checkbox"/> nucleotide and/or amino acid sequence listing in computer readable form 9. <input type="checkbox"/> other (specify):		
Figure of the drawings which should accompany the abstract: Fig. 1		Language of filing of the international application: Finnish		
Box No. IX SIGNATURE OF APPLICANT OR AGENT				
Next to each signature, indicate the name of the person signing and the capacity in which the person signs (if such capacity is not obvious from reading the request).				
Curiositas Ltd Oy				
  				
Antero Hälikkä Antero Hälikkä Aatu Koskensilta managing director				

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1. Date of actual receipt of the purported international application:	03 JUL 2000 (83-07-2000)	
3. Corrected date of actual receipt due to later but timely received papers or drawings completing the purported international application:		
4. Date of timely receipt of the required corrections under PCT Article 11(2):		
5. International Searching Authority (if two or more are competent): ISA / SE	6. <input checked="" type="checkbox"/> Transmittal of search copy delayed until search fee is paid.	

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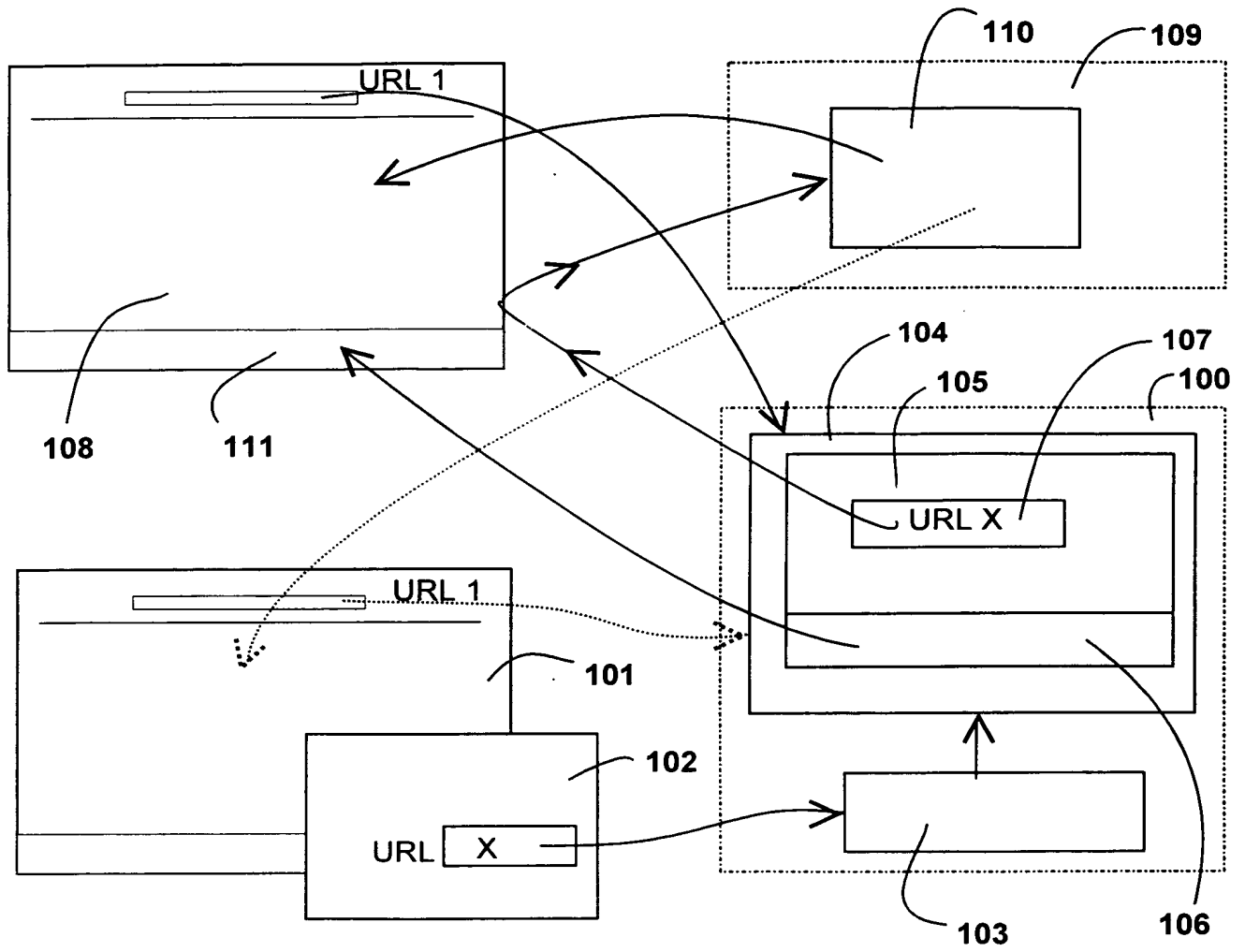


Fig. 1

2 / 2

LIST OF URLS

- ☐ ...info/data.html
- ☐ ...info/picture1.htm
- ☐ ...www.firm.com
- ☐

URL

102

201

202

Fig. 2

Menetelmä www-selaimen kauko-ohjaamiseksi

Keksinnön kohteena on menetelmä, jolla voidaan vaihtaa tietyllä yhdellä tai useammalla www-selaimella näkyvää sivua ohjaajan oman selaimen ikkunan kautta.

Sekä visuaalinen tiedonvälitys että puhekontakti voidaan nykyisellä tekniikalla toteuttaa yhtäaikaaisesti internet-verkon kautta. Tämä edellyttää kuitenkin osapuolet hankkimaan järjestelmiinsä äänentoistotekniikkaa ja erikoisohjelmistoja tunnettujen www-selainten, kuten Microsoft Internet Explorer, Netscape Navigator, lisäksi. Jo nykyisellä ja tavanomaisella internet-tekniikan tasolla kommunikointia puhelimella voidaan hyvin täydentää www-sivujen esittelemisellä, tyypillisesti kuvallisen informaation välittämiseksi ja siirtämiseksi. Kuvallisen internet-tiedon siirto perustuu kuitenkin selaimen aktiiviseen käyttöön niin, että hakija antaa selaimelleen osoitteita, joista tieto haetaan. Tällöin informaatiota esittelevän on puhelimessa ohjattava kumppaniaan tai asiakastaan valitsemaan aina tarvittava www-sivu tämän selaimelle annettavalla URL-osoitteella. Osoitteet ovat tyypillisesti hyvin pitkiä ja tällöin haitaksi muodostuu puhelimella annetun ohjeen epätarkkuus ja virhemahdollisuus erikoismerkkien osalta ja varsinkin jos pieniä ja isoja kirjaimia esiintyy merkkijonossa vaihtelevasti. Erityisesti tilanteessa, missä puhelinneuvottelua halutaan täydentää www-sivujen esittelyllä, joutuu puhelimella kuvia selostava ohjaamaan jokaista kuuntelijaa selaimen käytössä, mikä häiritsee varsinaista sisällön esittelyä, ja siksi tämä menettely ei ole käytännöllinen. Haitta korostuu erityisesti suuressa yleisötilaisuudessa, missä käytetään videotykkiä www-sivujen esittämiseen ja esittelijä pitää esitelmänsä puhelimen välityksellä. Myös sähköisessä kaupankäynnissä on tilanteita, joissa on tarve olla suorassa kontaktissa asiakkaaseen, jolloin puhelin on luonnollinen yhteydenottotapa. Tällöin esimerkiksi tuote-esittely voidaan käydä esittelemällä vain niitä www-sivuja, joissa on kiinnostavaa tietoa, mutta tämä vaatii jatkuvaa kuuntelijan ohjausta sivujen valitsemisessa.

Mainitut tapaukset ovat synnyttäneet tarpeen sellaisen menetelmän kehittämiseksi, joissa puhelimella erilaisia asioita esittelevä voi ohjata kuuntelijan www-selainta, tämän tarvitsematta kajota selai-meensa esittelyn aikana.

Tunnetut lähinnä vastaavanlaiseen tarkoitukseen tarkoitettut menetelmät vaativat eri osapuolten internet-valmiuksien täydentämistä lisäohjelmistolla ja -varusteilla ja niiden asentamista jokaisen kuuntelijan tietokoneelle.

Keksinnön tarkoituksena on välttää haitta, mikä aiheutuu lisäohjelmistojen ja -varusteiden puuttumisesta, niiden aiheuttamista kustannuksista tai puhelinlinjalla annettujen

ohjeiden tuottamasta häiriöstä esiteltävän aiheen informaatioisällölle ja virhemahdollisuudesta selaimilla katselevien URL-osoitteiden kirjoittamisessa. Keksinnön mukaisessa menetelmässä erityinen etu on siinä, että kuuntelevat osapuolet voivat jo tavanomaisilla internet-liittynöillä ja tavallisella puhelinyhteydellä, jo olemassa olevalla tavanomaisella internet- ja puhelintekniikalla, nauttia menetelmän tuottamasta hyödystä.

5 Mainittujen haittojen poistamiseksi ja etujen aikaansaamiseksi keksinnön mukaiselle menetelmälle on tunnusomaista se, että menetelmän käyttäjä, ohjaaja, omalla selaimellaan määrittelee kuulijoidensa selaimelle tulevan tietyn www-sivun ikkunaan näytettäväksi tarkoitetun sivun linkin, joka puolestaan määrittelee sen, mitä kuulijan selaimen ikkunassa esitetään.

10 Keksinnön mukaista menetelmää selostetaan seuraavassa esimerkin avulla viittaamalla oheisiin piirustuksiin, joissa

Fig. 1 esittää internet-selaimen kauko-ohjausmenetelmän toiminnallisia osia ja niiden välisiä yhteyksiä.

15 Fig. 2 esittää ohjausikkunaa, johon voidaan tuoda ennalta muistiin tallennettuja URL-osoitteita

Menetelmän käyttäjä, ohjaaja, pyytää asiakastaan tai keskustelukumppaniaan, jota kutsutaan jatkossa kuuntelijaksi, valitsemaan selaimellaan palvelimella (100) sijaitsevan osoitteen URL 1, jota hän myös seuraa omalla selaimellaan (101). Ohjaaja antaa omalta selaimen ohjausikkunalta (102) osoitteen URL X, joka vastaanotetaan palvelimella (100), olevan CGI-ohjelman (103) käsiteltäväksi. Monella eri tavalla, yleisesti tunnettua ohjelmointitekniikkaa käyttäen, voidaan luoda kokonaan tai osittain dynaamisia internet-sivuja selaimille. Esimerkitapauksessa ohjelma (103) luo sivun (104), jonka osoite on URL 1, ja sille tiedoston (105) ja haluttaessa informaatiokehyksen (106). Tiedostossa (105) on kehys (107), joka muodostaa ikkunan esitettävälle www-sivulle, joka löytyy osoitteesta URL X. Kuuntelijan selain (108) sekä ohjaajan selain (101) saatuaan www-sivun osoitteesta URL 1 hakee kehykseen (107) tiedoston (105) antamasta osoitteesta URL X, palvelimelta (109), www-sivun (110) ja näyttää sen kehyksessä (107). Sivun (104) huolehtii siitä, että kun osoite URL X vaihtuu uudeksi, niin selaimet (101) ja (108) päivittävät sivun vastaavasti. Päivitykseen voidaan käyttää selainten tuntemaa "RELOAD" tai "REFRESH" -komentoa. Sivun (104) voidaan varustaa myös sellaisella jatkuvasti palvelimella (100) olevaa parametria tarkkailevalla toiminnolla, ja sellaisella ohjelmalla (103), että kun tämä muuttaa osoitetta URL X, niin se muuttaa myös

tarkkailtavaa parametria, jonka huomattuaan sivun toiminto vasta käynnistää sivun (104) päivityksen. Yhden toteutustavan mukaisesti tiedoston ja sen sisältämän parametrin tarkkailuun selaimella voidaan käyttää JavaScript-ohjelmistokielen "FileUpload"-elementtiä tai vastaavaa toimintoa. Tällöin on huolehdittava siitä, että selain päivittää tietonsa palvelimelta eikä paikalliselta kovalevyltä (cache-muistista). Tämä voidaan toteuttaa esimerkiksi välittämällä selaimelle, usealla vaihtoehtoisella tavalla, pyyntö päivittämään muuttuvan parametrin sisältävä tiedosto palvelimelta html-sivun "META"-kentässä.

Kuvassa Fig. 2 on esitetty, millaiseksi ohjaajan ohjausikkuna (102) voidaan täydentää, jolloin siihen voidaan tuoda ennalta muistiin tallennettuja URL-osoitteita. Ikkuna toimii esimerkiksi niin, että valittu osoite siirtyy ikkunan (102) syöttökenttään (201), josta se siirtyy hyväksyntäkomennolla, painiketta (202) painamalla palvelimelle (100) (Fig. 1). Vastavalla tavalla voidaan myös luoda ohjausikkuna ja käyttää ennalta laadittua kuuntelijalistaa niistä, joille sallitaan pääsy www-sivulle (104).

Menetelmän toteuttamiseen kuvatulla tavalla tarvittavat internet-sivut, html-dokumentit, ja palvelimella toimivat ohjelmistot, ovat yleistä ja tunnettua ohjelmointitekniikkaa, joten menetelmän ja siihen tarvittavan ohjelmoinnin pystyy ammatinsa osaava henkilö tässä esitetyn kuvauksen perusteella toteuttamaan monella eri vaihtoehtoisella tavalla ja eri ohjelmointikielellä, tulkittavalla tai käännettävällä, ja/tai niiden yhdistelmällä. Esimerkkinä mainittakoon ohjelmistokielistä ActiveX, C, C++, Java, JavaScript, JScript, Perl, VBScript, mitkä eivät suinkaan rajoita toteuttamasta menetelmää vielä jollakin muulla standardoituun tiedonsiirtorajapintaan mukautuvalla kielellä.. Ohjeita menetelmän yksityiskohtaiseksi toteuttamiseksi saa runsaasti muun muassa mainittujen ohjelmistokieliä kehittäjien www-sivuilta sekä CGI-rajapinnan kehittäjän NCSA:n palvelimelta.

Keksinnön mukaisen menetelmän sovellutusmuodot voidaan luonnollisesti toteuttaa alan ammatti-ihmisen toimesta myös muullakin kuin edellä kuvatulla tavalla seuraavassa esitettyjen patenttivaatimusten puitteissa.

Patenttivaatimukset

1. Menetelmä www-selaimen kauko-ohjaamiseksi, missä ohjaaja omalla selaimellaan (102) määrittelee internetin kautta palvelimella (100), jolle hänellä on käyttöoikeus, sijaitsevalle menetelmään kuuluvalle ohjelmalle (103), joka ohjaa ohjelmakoodia sisältäviä tiedostoja, joita yhdistää yhden tai useamman kuuntelijan sivu (104), kuuntelijansa internet-selaimelle tarkoitetun html-dokumentin, jolle kuuntelijalle on pääsy selaimensa (108) ja käyttäjällä selaimensa (101) kautta, ilmoittaa sen kuuntelijan valittavaksi, valitsee edelleen selaimellaan sivun (104) ikkunassa (107) näytettäväksi tarkoitetun vapaasti valitun minkä tahansa www-sivun (110) osoitteen, joka välitetään palvelimelle, joka välittää sen ohjelmalle (103), joka puolestaan upottaa sivun (110) osoitteen kuuntelijan sivulle (104) t u n n e t t u siitä, että kuuntelijan sivu (104), kun kuuntelijan selain (108) näyttää sen, ohjaa tätä selainta jatkuvasti tarkistamaan käyttäjän palvelimelta mahdolliset muutokset sivuun (104), ja jos niitä havaitaan, päivittää vastaavasti kuuntelijan selaimen kopion sivusta (104) vastaamaan palvelimella sijaitsevaa tiedostoa.

2. Patenttivaatimuksen 1 mukainen menetelmä, t u n n e t t u siitä, että menetelmässä ehdollistetaan kuuntelijan sivun (104) päivittäminen tarkkailemalla kuuntelijan selaimella muutosta palvelimella olevassa parametrissa, jota ohjelma (103) muuttaa aina kun uusi www-osoite on valittu, jonka jälkeen vasta päivitetään kuuntelijan selaimen kopio sivusta (104).

3. Patenttivaatimuksen 1 mukainen menetelmä, t u n n e t t u siitä, että menetelmän käyttäjä voi poimia ennalta laaditusta selaimellaan näkyvästä osoitelistasta kulloinkin kuuntelijan näyttöikkunassa (107) näytettävän internet-sivun (110) osoitteen.

4. Patenttivaatimusten 1, 2, ja 3 mukainen menetelmä, t u n n e t t u siitä, että menetelmän käyttäjä voi ennalta laaditusta selaimellaan näkyvästä listasta poimia kuuntelijat, joille sallitaan pääsy sivulle (104).

(57) Tiivistelmä

5 Keksinnön kohteena on menetelmä, jolla voidaan vaihtaa etäällä, esimerkiksi puhelinyhteyden päässä, olevan yhden tai useamman kuulijan www-selaimella näkyvää sivua ohjaajan oman selaimen ikkunan kautta. Keksinnön mukaan ohjaaja opastaa aluksi kuulijansa valitsemaan tietyn, käytössään olevalle palvelimelle luodun, www-sivun, jota ohjaavalle ohjelmalle hän antaa uusia URL-osoitteita, jotka ohjelma puolestaan upottaa kuulijan selaimen sivulle. Tästä seuraa se, että kuulijan selain saa esitettäväkseen ohjaajan valitsemaa URL-osoitetta vastaavan sivun. Tämä toteutetaan niin, että kuulijan selain päivittää tietonsa aina palvelimelta, jolloin sivu uudistuu ohjaajan valintojen mukaisesti.

PATENT COOPERATION TREATY

From the
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

To:

CURIOSITAS LTD Ky
c/o Innovo Ky
Hermiankatu 8D
FIN-33720 Tampere
Finland

PCT

WRITTEN OPINION

(PCT Rule 66)

Date of mailing
(day/month/year)

12-07-2001

Applicant's or agent's file reference

REPLY DUE

within 60 days
from the above date of mailing

International application No.

PCT/FI00/00606

International filing date (day/month/year)

03.07.2000

Priority date (day/month/year)

07.07.1999

International Patent Classification (IPC) or both national classification and IPC₇

H04L 12/18, H04M 11/06

Applicant

CURIOSITAS LTD Ky et al

1. This written opinion is the first (first, etc.) drawn by this International Preliminary Examining Authority.

2. This opinion contains indications relating to the following items:

- I ☒ Basis of the report
- II ☐ Priority
- III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☒ Certain documents cited
- VII ☐ Certain defects in the international application
- VIII ☐ Certain observations on the international application

3. The applicant is hereby invited to reply to this opinion.

When? See the time limit indicated above. The applicant may, before the expiration of that time limit, request this Authority to grant an extension, see Rule 66.2(d).

How? By submitting a written reply, accompanied, where appropriate, by amendments, according to Rule 66.3. For the form and the language of the amendments, see Rules 66.8 and 66.9.

Also For an additional opportunity to submit amendments, see Rule 66.4.
For the examiner's obligation to consider amendments and/or arguments, see Rule 66.4bis.
For an informal communication with the examiner, see Rule 66.6.

If no reply is filed, the international preliminary examination report will be established on the basis of this opinion.

4. The final date by which the international preliminary examination report must be established according to Rule 69.2 is: 07.11.2001

Name and mailing address of the IPEA/SE

Patent- och registreringsverket
Box 5055
S-102 42 STOCKHOLM

Telex
17978
PATOREG-S

Authorized officer

Kristoffer Ogebjer/EE
Telephone No. 08-782 25 00

Facsimile No. 08-667 72 88

Form PCT/IPEA/408 (cover sheet) (January 1998)

WRITTEN OPINION

International application No.

PCT/FI00/00606

I. Basis of the opinion

1. With regard to the elements of the international application:*

- ☐ the international application as originally filed
- ☒ the description:
 pages 1-3, as originally filed
 pages _____, filed with the demand
 pages _____, filed with the letter of _____
- ☒ the claims:
 pages _____, as originally filed
 pages _____, as amended (together with any statement) under article 19
 pages 4, 5, filed with the demand
 pages _____, filed with the letter of _____
- ☒ the drawings:
 pages 1, 2, as originally filed
 pages _____, filed with the demand
 pages _____, filed with the letter of _____
- ☐ the sequence listing part of the description:
 pages _____, as originally filed
 pages _____, filed with the demand
 pages _____, filed with the letter of _____

2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language _____ which is:

- ☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of the translation furnished for the purposes of international preliminary examination (under Rules 55.2 and/or 55.3).

3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the written opinion was drawn on the basis of the sequence listing:

- ☐ contained in the international application in printed form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages _____
- ☐ the claims, Nos. _____
- ☐ the drawings, sheet/fig _____

5. ☒ This opinion has been drawn as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2 (c)).

* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this opinion as "originally filed".

Supplemental Box

(To be used when the space in any of the preceding boxes is not sufficient)

Continuation of: I

The amended claims 5-8 are considered to go beyond the disclosure as filed.

Claims 5 and 6: it is not stated in the filed disclosure that several controllers are sharing the actions of the server. Neither is this disclosed in fig. 1.

Claim 7: stating that thousands of browsers are monitoring the change is considered to go beyond the filed disclosure even though browsers are mentioned in plural in the original disclosure.

Claim 8: it is not stated in the filed disclosure that the controller instructs the listeners via a broadcasting media

WRITTEN OPINION

International application No.

PCT/FI00/00606

V. Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	<u>1-4</u>	YES
	Claims		NO
Inventive step (IS)	Claims	<u>2</u>	YES
	Claims	<u>1, 3, 4</u>	NO
Industrial applicability (IA)	Claims	<u>1-4</u>	YES
	Claims		NO

2. Citations and explanations

Cited documents:

D1: WO, A1, 9813995
D2: EP, A2, 0847178
D3: WO, A1, 9836456
D4: WO, A1, 9737484

D1 relates to a system that updates a meeting-place window of each user sharing a URL. The system receives an update request and, if the content has changed, sends the new content to the listener.

The inventive idea of the invention, according to claim 1, differs in the matter of the browser that checks for possible changes. In D1 the user request an update if a change has occurred, by this use of pulling updated information the invention, according to claim 1, is considered to lack an inventive step from what is known through D1.

To pick an address from a list, according to claims 3 and 4, is considered obvious to a person skilled in the art. Hence, the invention, according to claims 3 and 4, is considered to lack an inventive step.

D2 discloses a system where conferees may make editing changes to a currently viewed page and have the changes communicated to the other conferees via a conference server. Only the changes may be transmitted or the whole page including the changes may be transmitted from the conference server.

.../...

WRITTEN OPINION

International application No.

PCT/FI00/00606

Supplemental Box

(To be used when the space in any of the preceding boxes is not sufficient)

Continuation of: V

D3 relates to a system that updates HTML-pages to a customer and an agent from a server.

D4 relates to system where each client's WEB browser requests and displays an image of a selected presentation. The image gets updated through pushing an updated image to the client from the server.

WRITTEN OPINION

International application No.

PCT/FI00/00606

VI. Certain documents cited

1. Certain published documents (Rule 70.10)

Application No. Patent No.	Publication date (day/month/year)	Filing date (day/month/year)	Priority date (valid claim) (day/month/year)
WO 0045240 A2	03.08.2000	27.01.2000	29.01.1999

2. Non-written disclosures (Rule 70.9)

Kind of non-written disclosure	Date of non-written disclosure (day/month/year)	Date of written disclosure referring to non-written disclosure (day/month/year)

PATENT COOPERATION TREATY

From the
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

PCT

NOTIFICATION OF TRANSMITTAL OF INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Rule 71.1)

To:

CURIOSITAS LTD Ky
c/o Innovo Ky
Hermiankatu 8D
FIN-33720 Tampere
Finland

Date of mailing (day/month/year)	19-10-2001
-------------------------------------	------------

Applicant's or agent's file reference

IMPORTANT NOTIFICATION

International application No.

PCT/FI00/00606

International filing date (day/month/year)

03-07-2000

Priority date (day/month/year)

07-07-1999

Applicant

CURIOSITAS LTD Ky
et al

1. The applicant is hereby notified that this International Preliminary Examining Authority transmits herewith the international preliminary examination report and its annexes, if any, established on the international application.
2. A copy of the report and its annexes, if any, is being transmitted to the International Bureau for communication to all the elected Offices.
3. Where required by any of the elected Offices, the International Bureau will prepare an English translation of the report (but not of any annexes) and will transmit such translation to those Offices.
4. **REMINDER**

The applicant must enter the national phase before each elected Office by performing certain acts (filing translations and paying national fees) within 30 months from the priority date (or later in some Offices) (Article 39(1)) (see also the reminder sent by the International Bureau with Form PCT/IB/301).

where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary examination report. It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned.

For further details on the applicable time limits and requirements of the elected Offices, see Volume II of the PCT Applicant's Guide.

Name and mailing address of the IPEA/
Patent- och registreringsverket
Box 5055
S-102 42 STOCKHOLM
Facsimile No. 08-667 72 88

Telex
17978
PATOREG-S

Authorized officer

Marie Gysell

Telephone No. 08-782 25 00

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/PEA/416)	
International application No. PCT/FI00/00606	International filing date (<i>day month year</i>) 03.07.2000	Priority date (<i>day month year</i>) 07.07.1999
International Patent Classification (IPC) or national classification and IPC H04L 12/18, H04M 11/06		
Applicant CURIOSITAS LTD Ky et al		

<p>1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of <u>5</u> sheets, including this cover sheet.</p> <p><input checked="" type="checkbox"/> This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).</p> <p>These annexes consist of a total of <u>1</u> sheets.</p> <p>3. This report contains indications relating to the following items:</p> <ul style="list-style-type: none"> I <input checked="" type="checkbox"/> Basis of the report II <input type="checkbox"/> Priority III <input type="checkbox"/> Non-establishment of opinion with regard to novelty, inventive step and industrial applicability IV <input type="checkbox"/> Lack of unity of invention V <input checked="" type="checkbox"/> Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement VI <input checked="" type="checkbox"/> Certain documents cited VII <input type="checkbox"/> Certain defects in the international application VIII <input type="checkbox"/> Certain observations on the international application

Date of submission of the demand 29.01.2001	Date of completion of this report 17.10.2001
Name and mailing address of the IPEA/SE Patent- och registreringsverket Box 5055 S-102 42 STOCKHOLM Facsimile No. 08-667 72 88	Authorized officer Kristoffer Ogebjer /OGU Telephone No. 08-782 25 00

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/FI00/00606

I. Basis of the report

1. With regard to the elements of the international application:*

- ☐ the international application as originally filed
- ☒ the description:
pages 1-3, as originally filed
pages _____, filed with the demand
pages _____, filed with the letter of _____
- ☒ the claims:
pages _____, as originally filed
pages _____, as amended (together with any statement) under article 19
pages _____, filed with the demand
pages 4, filed with the letter of 28.08.2001
- ☒ the drawings:
pages 1-2, as originally filed
pages _____, filed with the demand
pages _____, filed with the letter of _____
- ☐ the sequence listing part of the description:
pages _____, as originally filed
pages _____, filed with the demand
pages _____, filed with the letter of _____

2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language English which is:

- ☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).
- ☒ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of the translation furnished for the purposes of international preliminary examination (under Rules 55.2 and/or 55.3).

3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages _____
- ☐ the claims, Nos. _____
- ☐ the drawings, sheet/fig _____

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2 (c)).**

* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are annexed to this report since they do not contain amendments (Rules 70.16 and 70.17).

** Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/FI00/00606

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	<u>1-4</u>	YES
	Claims		NO
Inventive step (IS)	Claims	<u>1-4</u>	YES
	Claims		NO
Industrial applicability (IA)	Claims	<u>1-4</u>	YES
	Claims		NO

2. Citations and explanations (Rule 70.7)

Cited documents:

D1: WO, A1, 9813995
D2: EP, A2, 0847178
D3: WO, A1, 9836456
D4: WO, A1, 9737484

D1 relates to a system that updates a meeting-place window of each user sharing a URL. The system receives an update request and, if the content has changed, sends the new content to the listener.

D2 discloses a system where conferees may make editing changes to a currently viewed page and have the changes communicated to the other conferees via a conference server. Only the changes may be transmitted or the whole page including the changes may be transmitted from the conference server.

D3 relates to a system that updates HTML-pages to a customer and an agent from a server.

D4 relates to system where each client's WEB browser requests and displays an image of a selected presentation. The image gets updated through pushing an updated image to the client from the server.

The invention defined in claims 1-4 is not disclosed by any of these documents.

None of the cited documents gives any indication towards the claimed method of changing a web page being displayed centrally. No relevant combination of the cited documents would lead a person skilled in the art to the invention defined in the claims.

.../...

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/FI00/00606

Supplemental Box

(To be used when the space in any of the preceding boxes is not sufficient)

Continuation of: Box V.

Therefore, the invention defined in claims 1-4 is novel and is considered to involve an inventive step. It is also considered to be industrially applicable.

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/FI00/00606

VI. Certain documents cited

1. Certain published documents (Rule 70.10)

Application No. Patent No.	Publication date (day month year)	Filing date (day month year)	Priority date (valid claim) (day month year)
WO 0045240 A2	03.08.2000	27.01.2000	29.01.1999

2. Non-written disclosures (Rule 70.9)

Kind of non-written disclosure	Date of non-written disclosure (day month year)	Date of written disclosure referring to non-written disclosure (day month year)

Claims

1. A method for remote directing a www-browser, in which the controller starting a session, using his/her own www-browser (102), specifies via Internet an HTML-document for the browser of one or more listeners, being accessible to them through their browsers (108), and to said controller through his or her browser (101), to a program, which is a part of the method and is located in a server (100) accessible to said controller; said program controlling code containing files embedded onto the page (104); said controller instructing the listeners via any simultaneously used media to choose said HTML-document, further specifying by means of his browser the address of the www-page (110) intended to be displayed in the window (107) of the page (104); and said address being further delivered to the server and to said program, which embeds said address of the page (110) onto the listeners' page (104) **characterized** in that the listeners' page (104), upon being displayed by listeners' browsers (108) and controller's browser (101), makes said browsers continuously check for possible changes in said documents in the controller's server (100), and finding the changes, refreshes the copy of the page (104) of said listeners' browsers to match said files at the server, the refreshing of the listeners' page (104) being conditioned by monitoring change in a parameter residing in the said server, changed by the program (103) upon a different www-address having been chosen, after which the copy of the page (104) in the listeners' www-browsers (108) and controller's www-browser (101) is refreshed.

2. A method as claimed in Claim 1 **characterized** in that the controller picks the address of the www-document displayed on the listeners' www-browsers (108) from a previously created list of www-addresses.

3. A method as claimed in Claim 1, and 2 **characterized** in that the controller chooses the listeners allowed to access to the page (104) from a previously created list displayed on his/her www-browser.

4. A method as claimed in Claims 1 and 2 **characterized** in that by browsers (101) and (108), several listeners and at least one controller by his/her browser (102) are sharing the actions of said server (100) and said program (103) during the session.

Claims

1. A method for remote directing a www-browser, in which the controller starting a session, using his/her own www-browser (102), specifies via Internet an HTML-document for the browser of one or more listeners, being accessible to them through their browsers (108), and to said controller through his or her browser (101), to a program, which is a part of the method and is located in a server (100) accessible to said controller; said program controlling code containing files embedded onto the page (104); said controller instructing the listeners via any simultaneously used media to choose said HTML-document, further specifying by means of his browser the address of the www-page (110) intended to be displayed in the window (107) of the page (104); and said address being further delivered to the server and to said program, which embeds said address of the page (110) onto the listener's page (104) **characterized** in that the listeners' page (104), upon being displayed by listeners' browsers (108), makes said browsers continuously check for possible changes in said documents in the controller's server (100), and finding the changes, refreshes the copy of the page (104) of said listener's browser to match said files at the server.

2. A method as claimed in Claim 1 **characterized** in that the refreshing of the client's page (104) is conditioned by monitoring change in a parameter residing in the said server, changed by the program (103) upon a different www-address having been chosen, after which the copy of the page (104) of the client's www-browser (102) is refreshed.

3. A method as claimed in Claim 1 and 2 **characterized** in that the controller picks the address of the www-document displayed on the clients' www-browsers (108) from a previously created list of www-addresses

4. A method as claimed in Claim 1, 2, and 3 **characterized** in that the controller chooses the client allowed to access to the page (104) from a previously created list displayed on his/her www-browser.

5. A method as claimed in Claims 1, 2, and 3 **characterized** in that by browsers (102) and (101), several controllers are sharing the actions of said server and said program during the session.

6. A method as claimed in Claims 1, 2, 3, and 5 **characterized** in that the combination of said listeners and said controllers varies by sessions.

7. A method as claimed in Claims 1 and 2, **characterized** in that the page (104) is displayed and said change is monitored by, say, thousands of listeners' browsers within a

session.

8. A method as claimed in Claims 1, 2, 3, and 7, **characterized** in that said controller instructs the listeners via a broadcasting media.

The demand must be filed directly with the competent International Preliminary Examining Authority or, if two or more Authorities are competent, with the one chosen by the applicant. The full name or two-letter code of that Authority may be indicated by the applicant on the line below:

IPEA/ SE

PCT

CHAPTER II

DEMAND

under Article 31 of the Patent Cooperation Treaty:
The undersigned requests that the international application specified below be the subject of international preliminary examination according to the Patent Cooperation Treaty and hereby elects all eligible States (except where otherwise indicated).

For International Preliminary Examining Authority use only

Identification of IPEA		Date of receipt of DEMAND
Box No. I IDENTIFICATION OF THE INTERNATIONAL APPLICATION		Applicant's or agent's file reference
International application No. PCT/FI00/00606	International filing date (day/month/year) 3.7.2000	(Earliest) Priority date (day/month/year) 7.7.1999
Title of invention Method for remote directing of www-browser		
Box No. II APPLICANT(S)		
Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country.) CURIOSITAS LTD Oy c/o Innovo Ky Hermiankatu 8 D FIN-33720 Tampere Finland		Telephone No.: +358 3 3165018 Facsimile No.: +358 3 3165808 Teleprinter No.:
State (that is, country) of nationality: Finland	State (that is, country) of residence: Finland	
Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country.) HÄLIKÄ, Antero Nurmenkatu 6 FIN-33820 Tampere Finland		
State (that is, country) of nationality: Finland	State (that is, country) of residence: Finland	
Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country.) KOSKENSILTA, Aatu Kaupinkatu 24 A 22 FIN-33500 Tampere Finland		
State (that is, country) of nationality: Finland	State (that is, country) of residence: Finland	
<input type="checkbox"/> Further applicants are indicated on a continuation sheet.		

Box No. III AGENT OR COMMON REPRESENTATIVE; OR ADDRESS FOR CORRESPONDENCEThe following person is ☐ agent ☐ common representativeand ☐ has been appointed earlier and represents the applicant(s) also for international preliminary examination.☐ is hereby appointed and any earlier appointment of (an) agent(s)/common representative is hereby revoked.☐ is hereby appointed, specifically for the procedure before the International Preliminary Examining Authority, in addition to the agent(s)/common representative appointed earlier.Name and address: *(Family name followed by given name; for a legal entity, full official designation.
The address must include postal code and name of country.)*

Telephone No.:

Facsimile No.:

Teleprinter No.:

☐ **Address for correspondence:** Mark this check-box where no agent or common representative is/has been appointed and the space above is used instead to indicate a special address to which correspondence should be sent.**Box No. IV BASIS FOR INTERNATIONAL PRELIMINARY EXAMINATION****Statement concerning amendments:***

1. The applicant wishes the international preliminary examination to start on the basis of:

☐ the international application as originally filedthe description ☒ as originally filed☐ as amended under Article 34the claims ☐ as originally filed☐ as amended under Article 19 (together with any accompanying statement)☒ as amended under Article 34the drawings ☒ as originally filed☐ as amended under Article 342. ☐ The applicant wishes any amendment to the claims under Article 19 to be considered as reversed.3. ☐ The applicant wishes the start of the international preliminary examination to be postponed until the expiration of 20 months from the priority date unless the International Preliminary Examining Authority receives a copy of any amendments made under Article 19 or a notice from the applicant that he does not wish to make such amendments (Rule 69.1(d)). *(This check-box may be marked only where the time limit under Article 19 has not yet expired.)*

* Where no check-box is marked, international preliminary examination will start on the basis of the international application as originally filed or, where a copy of amendments to the claims under Article 19 and/or amendments of the international application under Article 34 are received by the International Preliminary Examining Authority before it has begun to draw up a written opinion or the international preliminary examination report, as so amended.

Language for the purposes of international preliminary examination: english☐ which is the language in which the international application was filed.☐ which is the language of a translation furnished for the purposes of international search.☒ which is the language of publication of the international application.☐ which is the language of the translation (to be) furnished for the purposes of international preliminary examination.**Box No. V ELECTION OF STATES**The applicant hereby elects all eligible States *(that is, all States which have been designated and which are bound by Chapter II of the PCT)*

excluding the following States which the applicant wishes not to elect:

Box No. VI CHECK LIST

The demand is accompanied by the following elements, in the language referred to in Box No. IV, for the purposes of international preliminary examination:

- | | | |
|--|---|----------|
| 1. translation of international application | : | sheets |
| 2. amendments under Article 34 | : | 2 sheets |
| 3. copy (or, where required, translation) of amendments under Article 19 | : | sheets |
| 4. copy (or, where required, translation) of statement under Article 19 | : | sheets |
| 5. letter Applicant's opinion | : | 2 sheets |
| 6. other (specify) | : | sheets |

For International Preliminary
Examining Authority use only

received not received

<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>

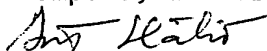
The demand is also accompanied by the item(s) marked below:

- | | |
|--|---|
| 1. <input checked="" type="checkbox"/> fee calculation sheet | 4. <input type="checkbox"/> statement explaining lack of signature |
| 2. <input type="checkbox"/> separate signed power of attorney | 5. <input type="checkbox"/> nucleotide and or amino acid sequence listing in computer readable form |
| 3. <input type="checkbox"/> copy of general power of attorney; reference number, if any: | 6. <input type="checkbox"/> other (specify): |

Box No. VII SIGNATURE OF APPLICANT, AGENT OR COMMON REPRESENTATIVE

Next to each signature, indicate the name of the person signing and the capacity in which the person signs (if such capacity is not obvious from reading the demand).

Tampere, 25.1.2001



Antero Hälikkä

For International Preliminary Examining Authority use only

1. Date of actual receipt of DEMAND:

2. Adjusted date of receipt of demand due to CORRECTIONS under Rule 60.1(b):

3. ☐ The date of receipt of the demand is AFTER the expiration of 19 months from the priority date and item 4 or 5, below, does not apply.

☐ The applicant has been informed accordingly.

4. ☐ The date of receipt of the demand is WITHIN the period of 19 months from the priority date as extended by virtue of Rule 80.5.

5. ☐ Although the date of receipt of the demand is after the expiration of 19 months from the priority date, the delay in arrival is EXCUSED pursuant to Rule 82.

For International Bureau use only

Demand received from IPEA on:

REC'D 24 OCT 2001

WIPO

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

14

Applicant's or agent's file reference	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/PEA/416)	
International application No. PCT/FI00/00606	International filing date (<i>day month year</i>) 03.07.2000	Priority date (<i>day month year</i>) 07.07.1999
International Patent Classification (IPC) or national classification and IPC H04L 12/18, H04M 11/06		
Applicant CURIOSITAS LTD Ky et al		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of 5 sheets, including this cover sheet.

☒ This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of 1 sheets.

3. This report contains indications relating to the following items:

- I ☒ Basis of the report
- II ☐ Priority
- III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☒ Certain documents cited
- VII ☐ Certain defects in the international application
- VIII ☐ Certain observations on the international application

Date of submission of the demand 29.01.2001	Date of completion of this report 17.10.2001
Name and mailing address of the IPEA/SE Patent- och registreringsverket Box 5055 S-102 42 STOCKHOLM Facsimile No. 08-667 72 88	Authorized officer Kristoffer Ogebjer /OGU Telephone No. 08-782 25 00

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/FI00/00606

I. Basis of the report

1. With regard to the **elements** of the international application:*

- ☐ the international application as originally filed
- ☒ the description:
pages 1-3 , as originally filed
pages _____ , filed with the demand
pages _____ , filed with the letter of _____
- ☒ the claims:
pages _____ , as originally filed
pages _____ , as amended (together with any statement) under article 19
pages _____ , filed with the demand
pages 4 , filed with the letter of 28.08.2001
- ☒ the drawings:
pages 1-2 , as originally filed
pages _____ , filed with the demand
pages _____ , filed with the letter of _____
- ☐ the sequence listing part of the description:
pages _____ , as originally filed
pages _____ , filed with the demand
pages _____ , filed with the letter of _____

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.These elements were available or furnished to this Authority in the following language English which is:

- ☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).
- ☒ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of the translation furnished for the purposes of international preliminary examination (under Rules 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages _____
- ☐ the claims, Nos. _____
- ☐ the drawings, sheet/fig _____

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2 (c)).**

* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are annexed to this report since they do not contain amendments (Rules 70.16 and 70.17).

** Any replacement sheet containing such amendments must be referred to under item I and annexed to this report.

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/FI00/00606

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**1. Statement**

Novelty (N)	Claims	<u>1-4</u>	YES
	Claims		NO
Inventive step (IS)	Claims	<u>1-4</u>	YES
	Claims		NO
Industrial applicability (IA)	Claims	<u>1-4</u>	YES
	Claims		NO

2. Citations and explanations (Rule 70.7)

Cited documents:

D1: WO, A1, 9813995
D2: EP, A2, 0847178
D3: WO, A1, 9836456
D4: WO, A1, 9737484

D1 relates to a system that updates a meeting-place window of each user sharing a URL. The system receives an update request and, if the content has changed, sends the new content to the listener.

D2 discloses a system where conferees may make editing changes to a currently viewed page and have the changes communicated to the other conferees via a conference server. Only the changes may be transmitted or the whole page including the changes may be transmitted from the conference server.

D3 relates to a system that updates HTML-pages to a customer and an agent from a server.

D4 relates to system where each client's WEB browser requests and displays an image of a selected presentation. The image gets updated through pushing an updated image to the client from the server.

The invention defined in claims 1-4 is not disclosed by any of these documents.

None of the cited documents gives any indication towards the claimed method of changing a web page being displayed centrally. No relevant combination of the cited documents would lead a person skilled in the art to the invention defined in the claims.

.../...

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/FI00/00606

Supplemental Box

(To be used when the space in any of the preceding boxes is not sufficient)

Continuation of: Box V.

Therefore, the invention defined in claims 1-4 is novel and is considered to involve an inventive step. It is also considered to be industrially applicable.

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/FI00/00606

VI. Certain documents cited

1. Certain published documents (Rule 70.10)

Application No. Patent No.	Publication date (day month year)	Filing date (day month year)	Priority date (valid claim) (day month year)
WO 0045240 A2	03.08.2000	27.01.2000	29.01.1999

2. Non-written disclosures (Rule 70.9)

Kind of non-written disclosure	Date of non-written disclosure (day month year)	Date of written disclosure referring to non-written disclosure (day month year)

Claims

1. A method for remote directing a www-browser. in which the controller. using his own www-browser (102), specifies via Internet /an HTML-document for the browser of one or more listeners. being accessible to them trough their browsers (108), and to said controller trough his or her browser (101). to a program. which is a part of the method and is located in a server (100) accessible to said controller: said program controlling code containing files embedded onto the page (104); said controller instructing the listeners to choose said HTML-document. further specifying by means of his browser the address of the www-page (110) intended to be displayed in the window (107) of the page (104); and said address being further delivered to the server and to said program. which embeds said address of the page (110) onto the listener's page (104) wherein: the listeners' page (104), upon being displayed by listeners' browsers (108), makes said browsers continuously check for possible changes in said documents in said controller's server. and finding the changes. refreshes the copy of the page (104) of said listener's browser to match said files at the server.

2. A method as claimed in claim 1 wherein the refreshing of the client's page (104) is conditioned by monitoring change in a parameter residing in the said server. changed by the program (103) upon a different www-address having been chosen. after which the copy of the page of the client's www-browser is refreshed.

3. A method as claimed in claim 1. wherein the controller can pick the address of the www-document displayed on the clients' www-browsers from a previously created list of www-addresses

4. A method as claimed in claim 1, 2, and 3 wherein the controller can choose the client allowed to access to the page (104) from a previously created list displayed on his or her www-browser.

Replaced by Article 34

Method for remote directing of www-browser

The content of the invention is a method by which the www-document displayed on one or more www-browsers can be changed by the controller through a window of his or her www-browser.

Simultaneous visual communication and phone contact is possible with current Internet technology. However, this requires that all parties have the necessary audio hardware as well as special software extensions to known www-browsers, such as Microsoft Internet Explorer and Netscape Navigator. With current technology it is possible to augment phone communication with presenting www-documents, usually to provide visual information. The transmission of visual information is based on active use of the www-browser, in that the controller gives www-addresses to the listener, who then proceeds to direct his www-browser to the given www-address. The www-addresses are usually fairly long, and thus the imprecision of instructions given on phone is a disadvantage, especially due to the presence of special control characters and case sensitivity in the www-addresses (URLs). Especially in a situation in which it is desired that a phone negotiation be augmented with presentation of www-pages, the maintainer of the negotiation has to specifically instruct each party in using their respective www-browsers, making it hard for them to appreciate the contents of the presented www-documents. This makes the arrangement impractical: the disadvantage manifests itself especially when the intended audience is large, with a video projector or similar piece of equipment used to display the www-pages. Also in e-commerce there are situations in which a direct contact to the customer is required, making the phone a natural choice for communication. In such situations, say, product presentations can only be done by means of www-documents with the relevant information - this however requires constant instruction from the maintainer for the client in directing his www-browser to the desired documents.

The aforementioned situations have created a need for creating a method by which the www-browser of a listener can be controlled by the presenter without the need for the active participation of the client.

Known methods for similar purposes require all parties to obtain special software and equipment and install them onto their computers prior to the presentation.

The intent of the invention is to avoid the disadvantage caused by the special purpose additional software and equipment, namely their cost, the additional time required to

instruct clients in installing and maintaining the special purpose components and the possibility of errors in writing and communicating URLs. The invention possesses the specific advantage of all parties being able to use the method with ordinary Internet-connections and ordinary phone line utilizing pre-existing Internet and telecommunications technology.

Characteristic to the method based on the invention is that in order to avoid the aforementioned disadvantages and bring forth the aforementioned advantages, the user of the method, controller, defines by means of her or his www-browser the specific www-document which is displayed in a window of the clients' www-browsers.

Method based on the invention is illustrated and explicated by means of the following diagrams, in which

Fig. 1 presents the functional portions and interrelations thereof of the remote controlling of www-browser.

Fig. 2 presents the control window, into which previously saved URLs can be brought.

The user of the method, controller, asks his clients or conversant, henceforth listener, to direct his or her www-browser to a www-document specified by an URL pointing to a document in a server (100). The controller monitors this www-document in his own www-browser (101). The controller gives in the controller window in his or her www-browser (102) an address URL X, which is received in the server (100), and directed to a CGI-program (103) for processing. In various well known ways, it is possible to create partially or entirely dynamic www-documents. In the example the CGI-program (103) creates a www-document (104) containing the URL 1, and for it a file (105), and optionally an information frame (106). In the file (105) there is a frame (107) which forms a window for the www-document to be presented, found at URL X. Both the client's www-browser (108) and the controllers www-browser (101) upon receiving the www-document from URL 1, retrieve in the frame (107) a www-document at server (109) pointed to by the URL X the file (105). The document (104) ensures that when the URL X is changed, www-browsers (101) and (108) refresh the document respectively. This can be achieved by means of the command "RELOAD" or "REFRESH" supported by www-browsers. The document (104) can also implement a mechanism, which continuously monitors a parameter at the server (100), and a program (103) which when URL X is changed sets the parameter, which is noticed by the mechanism, which then proceeds to refresh the document (104). A possible implementation uses the JavaScript-language element "FileUpload" or an equivalent thereof, with the parameter

residing within a file in server (100). In the implementation, special care is needed to ensure that the www-browsers retrieve the actual changed documents instead of relying on their local on-disk cache. This can be done in several ways, which include using the "META"-field of html-documents to request the www-browser to update the changing parameter.

Fig. 2. illustrates one possibility of extending the control window (102), allowing previously saved URLs be brought into it. For example, the window could function in such a fashion that the URL chosen is transferred to the input field (201) of the window (102), from which it is transferred to the server (100) (Fig 1.) by pressing the acknowledgement button (202). In similar fashion it is possible to create a control window which uses a previously created list of listeners allowed to access the www-document (104).

The www-documents and server-side programs required to implement the method as described above are well-known technology, and thus a competent person can create a working implementation based on the description above in an alternative ways in different programming languages, both interpreted and compiled, including combinations of both. These languages include, but are not restricted to, ActiveX, C, C++, Java, JavaScript, JScript, Perl, VBScript. Instructions on implementing the details of the method are plentiful and can be found among other places at the www-sites of the developers of the respective languages, and the NCSA-server of the developers of the CGI-interface.

Naturally, a competent professional in the industry can implement the method based on the invention in ways not subsumed under the above description within the restrictions set by the following claims.

Claims

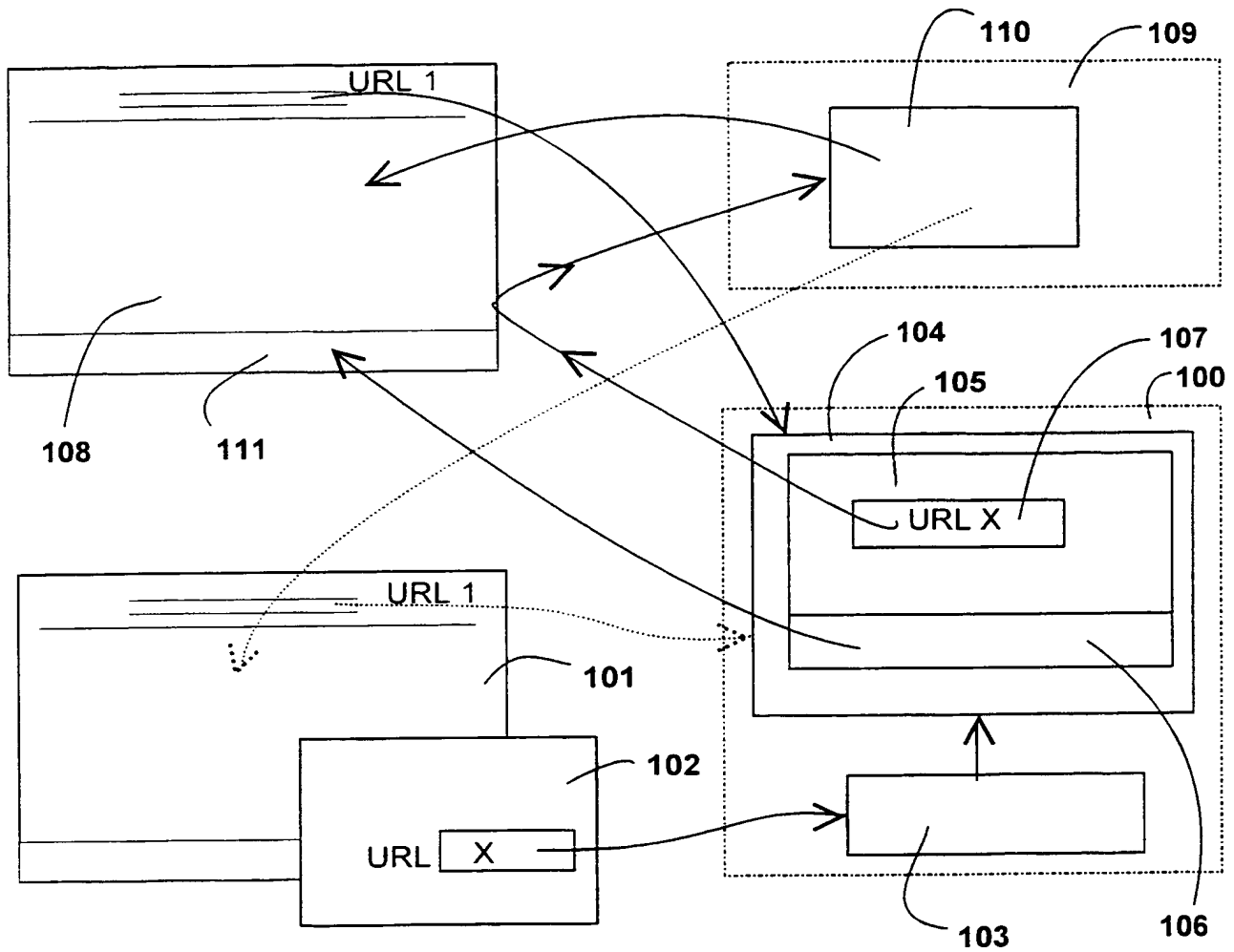
1. A method for remote directing a www-browser, in which the controller, using his own www-browser (102), specifies via Internet an HTML-document for the browser of one or more listeners, being accessible to them through their browsers (108), and to said controller through his or her browser (101), to a program, which is a part of the method and is located in a server (100) accessible to said controller; said program controlling code containing files embedded onto the page (104); said controller instructing the listeners to choose said HTML-document, further specifying by means of his browser the address of the www-page (110) intended to be displayed in the window (107) of the page (104); and said address being further delivered to the server and to said program, which embeds said address of the page (110) onto the listener's page (104) wherein:
the listeners' page (104), upon being displayed by listeners' browsers (108), makes said browsers continuously check for possible changes in said documents in said controller's server, and finding the changes, refreshes the copy of the page (104) of said listener's browser to match said files at the server.

2. A method as claimed in claim 1 wherein the refreshing of the client's page (104) is conditioned by monitoring change in a parameter residing in the said server, changed by the program (103) upon a different www-address having been chosen, after which the copy of the page of the client's www-browser is refreshed.

3. A method as claimed in claim 1, wherein the controller can pick the address of the www-document displayed on the clients' www-browsers from a previously created list of www-addresses

4. A method as claimed in claim 1, 2, and 3 wherein the controller can choose the client allowed to access to the page (104) from a previously created list displayed on his or her www-browser.

1 / 2

**Fig. 1**

LIST OF URLS

- ☐ ...info/data.html
- ☐ ...info/picture1.htm
- ☐ ...www.firm.com
- ☐

URL

102

201

202

Fig. 2

INTERNATIONAL SEARCH REPORT

International application No.

PCT/FI 00/00606

A. CLASSIFICATION OF SUBJECT MATTER

IPC7: H04L 12/18, H04M 11/06

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC7: H04M, H04L

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

SE,DK,FI,NO classes as above

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 9813995 A1 (BRITISH TELECOMMUNICATIONS PUBLIC LIMITED COMPANY), 2 April 1998 (02.04.98), page 18, line 15 - page 20, line 11 --	1-4
X	EP 0847178 A2 (INTERNATIONAL BUSINESS MACHINES CORPORATION), 10 June 1998 (10.06.98), column 13, line 26 - column 14, line 42 --	1-4
A	WO 9836456 A1 (BRITISH TELECOMMUNICATIONS PUBLIC LIMITED COMPANY), 20 August 1998 (20.08.98), page 5, line 9 - line 27 --	1-4

☒ Further documents are listed in the continuation of Box C.☒ See patent family annex.

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"I" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance: the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance: the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search

28 November 2000

Date of mailing of the international search report

01-12-2000

Name and mailing address of the ISA/

Swedish Patent Office

Box 5055, S-102 42 STOCKHOLM

Facsimile No. +46 8 666 02 86

Authorized officer

Kristoffer Ogebjer/LR

Telephone No. +46 8 782 25 00

INTERNATIONAL SEARCH REPORT

International application No.

PCT/FI 00/00606

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WO 9737484 A1 (NORTHERN TELECOM LIMITED), 9 October 1997 (09.10.97), page 19, line 22 - page 20, line 37 --	1-4
P,A	WO 0033533 A1 (RED FIG LIMITED), 8 June 2000 (08.06.00), page 22, line 5 - line 20; page 23, line 10 - line 15; page 24, line 23 - line 28 --	1-4
P,A	US 5978828 A (P. GREER ET AL), 2 November 1999 (02.11.99), figure 10 --	1-2
E	WO 0045240 A2 (QUINTAS CORPORATION), 3 August 2000 (03.08.00), page 32, line 18 - line 31; page 24, line 6 - line 11 -- -----	1-2

INTERNATIONAL SEARCH REPORT

Information on patent family members

02/11/00

International application No.

PCT/FI 00/00606

Patent document cited in search report				Publication date		Patent family member(s)	Publication date
WO	9813995	A1	02/04/98	AU	4315097	A	17/04/98
				EP	1008258	A	14/06/00
				GB	9620000	D	00/00/00
				GB	9620260	D	00/00/00
				GB	9705097	D	00/00/00
EP	0847178	A2	10/06/98	CA	2223845	A	06/06/98
				CN	1185071	A	17/06/98
				JP	10257190	A	25/09/98
				US	5916302	A	29/06/99
WO	9836456	A1	20/08/98	AU	5995198	A	08/09/98
				EP	0962029	A	08/12/99
WO	9737484	A1	09/10/97	CA	2221702	A	09/10/97
				EP	0829160	A	18/03/98
				JP	11506595	T	08/06/99
WO	0033533	A1	08/06/00	AU	6213299	A	19/06/00
				GB	2344491	A	07/06/00
				GB	9826640	D	00/00/00
US	5978828	A	02/11/99	NONE			
WO	0045240	A2	03/08/00	NONE			

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau



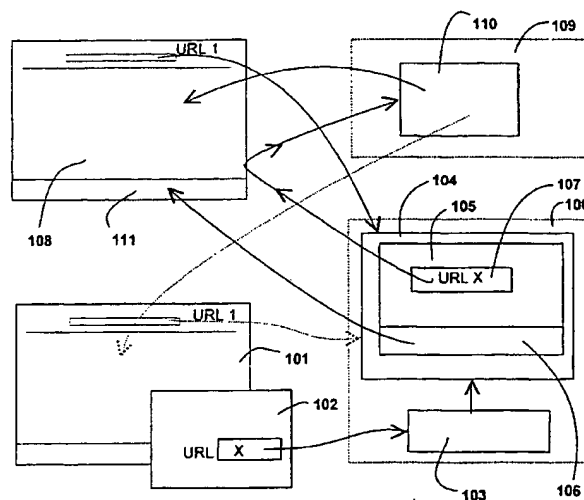
(43) International Publication Date
18 January 2001 (18.01.2001)

PCT

(10) International Publication Number
WO 01/05093 A1

- (51) International Patent Classification⁷: **H04L 12/18, H04M 11/06**
- (21) International Application Number: **PCT/FI00/00606**
- (22) International Filing Date: **3 July 2000 (03.07.2000)**
- (25) Filing Language: **Finnish**
- (26) Publication Language: **English**
- (30) Priority Data:
991557 7 July 1999 (07.07.1999) FI
- (81) Designated States (*national*): AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.
- (84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).
- (71) Applicant (*for all designated States except US*): **CURIOSITAS LTD OY [FI/FI]; c/o Innovo Ky, Hermiankatu 8D, FIN-33720 Tampere (FI).**
- Published:**
— *With international search report.*
— *Before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments.*
- (72) Inventors; and
(75) Inventors/Applicants (*for US only*): **HÄLIKÄ, Antero [FI/FI]; Nurmenkatu 6, FIN-33820 Tampere (FI). KOSKENSILTA, Aatu [FI/FI]; Kaupinkatu 24 A 22, FIN-33500 Tampere (FI).**
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

(54) Title: **METHOD FOR REMOTE DIRECTING OF WWW-BROWSER**



(57) Abstract: The content of the invention is a method, by which it is possible to remotely, for example within phone-contact range, change the www-document (104) displayed on the www-browsers (108) of one or more clients, with a controller window (102) on the controller's own www-browser (101). According to the invention, the controller instructs the clients to choose a particular www-document (104) residing in a server (100) used by the controller; said document being maintained by a server-side program (103) which can be commanded by the controller to embed URLs in the said www-document. As a result of the actions of the program, the clients' www-browsers display the document (110) specified by the URL given by the controller. This is achieved by having the clients' www-browsers update its state from the server, causing the displayed page to be refreshed, according to the controller's choice.

WO 01/05093 A1

INTERNATIONAL SEARCH REPORT

International application No.

PCT/FI 00/00606

A. CLASSIFICATION OF SUBJECT MATTER

IPC7: H04L 12/18, H04M 11/06

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC7: H04M, H04L

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

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Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 9813995 A1 (BRITISH TELECOMMUNICATIONS PUBLIC LIMITED COMPANY), 2 April 1998 (02.04.98), page 18, line 15 - page 20, line 11 --	1-4
X	EP 0847178 A2 (INTERNATIONAL BUSINESS MACHINES CORPORATION), 10 June 1998 (10.06.98), column 13, line 26 - column 14, line 42 --	1-4
A	WO 9836456 A1 (BRITISH TELECOMMUNICATIONS PUBLIC LIMITED COMPANY), 20 August 1998 (20.08.98), page 5, line 9 - line 27 --	1-4

☒ Further documents are listed in the continuation of Box C.☒ See patent family annex.

* Special categories of cited documents

"A" document defining the general state of the art which is not considered to be of particular relevance

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INTERNATIONAL SEARCH REPORT

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C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WO 9737484 A1 (NORTHERN TELECOM LIMITED), 9 October 1997 (09.10.97), page 19, line 22 - page 20, line 37 --	1-4
P,A	WO 0033533 A1 (RED FIG LIMITED), 8 June 2000 (08.06.00), page 22, line 5 - line 20; page 23, line 10 - line 15; page 24, line 23 - line 28 --	1-4
P,A	US 5978828 A (P. GREER ET AL), 2 November 1999 (02.11.99), figure 10 --	1-2
E	WO 0045240 A2 (QUINTAS CORPORATION), 3 August 2000 (03.08.00), page 32, line 18 - line 31; page 24, line 6 - line 11 -- -----	1-2

INTERNATIONAL SEARCH REPORT

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02/11/00

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Patent document cited in search report			Publication date	Patent family member(s)		Publication date
WO	9813995	A1	02/04/98	AU	4315097 A	17/04/98
				EP	1008258 A	14/06/00
				GB	9620000 D	00/00/00
				GB	9620260 D	00/00/00
				GB	9705097 D	00/00/00

EP	0847178	A2	10/06/98	CA	2223845 A	06/06/98
				CN	1185071 A	17/06/98
				JP	10257190 A	25/09/98
				US	5916302 A	29/06/99

WO	9836456	A1	20/08/98	AU	5995198 A	08/09/98
				EP	0962029 A	08/12/99

WO	9737484	A1	09/10/97	CA	2221702 A	09/10/97
				EP	0829160 A	18/03/98
				JP	11506595 T	08/06/99

WO	0033533	A1	08/06/00	AU	6213299 A	19/06/00
				GB	2344491 A	07/06/00
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(72) Inventors; and

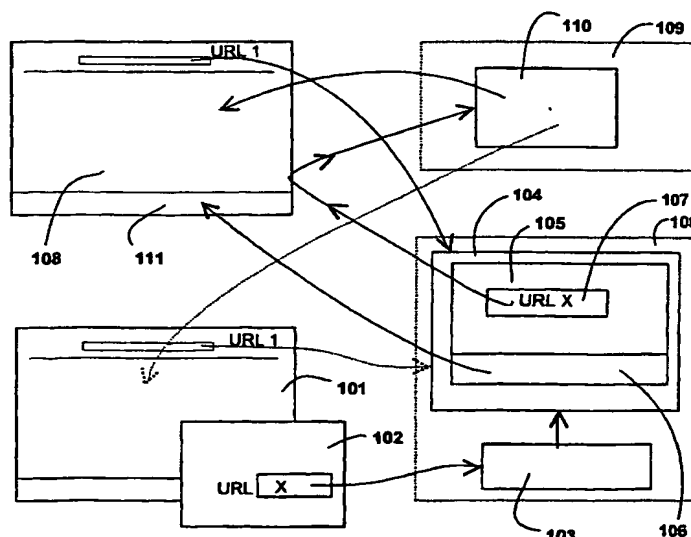
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[Continued on next page]

(54) Title: METHOD FOR REMOTE DIRECTING OF WWW-BROWSER



(57) Abstract: The content of the invention is a method, by which it is possible to remotely, for example within phone-contact range, change the www-document (104) displayed on the www-browsers (108) of one or more clients, with a controller window (102) on the controller's own www-browser (101). According to the invention, the controller instructs the clients to choose a particular www-document (104) residing in a server (100) used by the controller; said document being maintained by a server-side program (103) which can be commanded by the controller to embed URLs in the said www-document. As a result of the actions of the program, the clients' www-browsers display the document (110) specified by the URL given by the controller. This is achieved by having the clients' www-browsers update its state from the server, causing the displayed page to be refreshed, according to the controller's choice.



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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

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Method for remote directing of www-browser

The content of the invention is a method by which the www-document displayed on one or more www-browsers can be changed by the controller through a window of his or her www-browser.

5 Simultaneous visual communication and phone contact is possible with current Internet technology. However, this requires that all parties have the necessary audio hardware as well as special software extensions to known www-browsers, such as Microsoft Internet Explorer and Netscape Navigator. With current technology it is possible to augment phone communication with presenting www-documents, usually to provide visual information. The
10 transmission of visual information is based on active use of the www-browser, in that the controller gives www-addresses to the listener, who then proceeds to direct his www-browser to the given www-address. The www-addresses are usually fairly long, and thus the imprecision of instructions given on phone is a disadvantage, especially due to the presence of special control characters and case sensitivity in the www-addresses (URLs). Especially in a
15 situation in which it is desired that a phone negotiation be augmented with presentation of www-pages, the maintainer of the negotiation has to specifically instruct each party in using their respective www-browsers, making it hard for them to appreciate the contents of the presented www-documents. This makes the arrangement impractical; the disadvantage manifests itself especially when the intended audience is large, with a video projector or
20 similar piece of equipment used to display the www-pages. Also in e-commerce there are situations in which a direct contact to the customer is required, making the phone a natural choice for communication. In such situations, say, product presentations can only be done by means of www-documents with the relevant information - this however requires constant instruction from the maintainer for the client in directing his www-browser to the desired
25 documents.

The aforementioned situations have created a need for creating a method by which the www-browser of a listener can be controlled by the presenter without the need for the active participation of the client.

Known methods for similar purposes require all parties to obtain special
30 software and equipment and install them onto their computers prior to the presentation.

The intent of the invention is to avoid the disadvantage caused by the special purpose additional software and equipment, namely their cost, the additional time required to

instruct clients in installing and maintaining the special purpose components and the possibility of errors in writing and communicating URLs. The invention possesses the specific advantage of all parties being able to use the method with ordinary Internet-connections and ordinary phone line utilizing pre-existing Internet and telecommunications technology.

Characteristic to the method based on the invention is that in order to avoid the
5 aforementioned disadvantages and bring forth the aforementioned advantages, the user of the method. controller, defines by means of her or his www-browser the specific www-document which is displayed in a window of the clients' www-browsers.

Method based on the invention is illustrated and explicated by means of the following diagrams. in which

10 Fig. 1 presents the functional portions and interrelations thereof of the remote controlling of www-browser.

Fig. 2 presents the control window, into which previously saved URLs can be brought.

The user of the method, controller, asks his clients or conversant. henceforth
15 listener. to direct his or her www-browser to a www-document specified by an URL pointing to a document in a server (100). The controller monitors this www-document in his own www-browser (101). The controller gives in the controller window in his or her www-browser (102) an address URL X, which is received in the server (100), and directed to a CGI-program (103) for processing. In various well known ways, it is possible to create partially or entirely
20 dynamic www-documents. In the example the CGI-program (103) creates a www-document (104) containing the URL 1. and for it a file (105). and optionally an information frame (106). In the file (105) there is a frame (107) which forms a window for the www-document to be presented , found at URL X. Both the client's www-browser (108) and the controllers
www-browser (101) upon receiving the www-document from URL 1, retrieve in the frame
25 (107) a www-document at server (109) pointed to by the URL X the file (105). The document (104) ensures that when the URL X is changed. www-browsers (101) and (108) refresh the document respectively. This can be achieved by means of the command "RELOAD" or "REFRESH" supported by www-browsers. The document (104) can also implement a
mechanism, which continuously monitors a parameter at the server (100), and a program (103)
30 which when URL X is changed sets the parameter, which is noticed by the mechanism, which then proceeds to refresh the document (104). A possible implementation uses the JavaScript-language element "FileUpload" or an equivalent thereof, with the parameter

residing within a file in server (100). In the implementation, special care is needed to ensure that the www-browsers retrieve the actual changed documents instead of relying on their local on-disk cache. This can be done in several ways, which include using the "META"-field of html-documents to request the www-browser to update the changing parameter.

Fig. 2. illustrates one possibility of extending the control window (102),
5 allowing previously saved URLs be brought into it. For example, the window could function in such a fashion that the URL chosen is transferred to the input field (201) of the window (102), from which it is transferred to the server (100) (Fig 1.) by pressing the acknowledgement button (202). In similar fashion it is possible to create a control window which uses a previously created list of listeners allowed to access the www-document (104).

10 The www-documents and server-side programs required to implement the method as described above are well-known technology, and thus a competent person can create a working implementation based on the description above in an alternative ways in different programming languages, both interpreted and compiled, including combinations of both. These languages include, but are not restricted to, ActiveX, C, C++, Java, JavaScript,
15 JScript, Perl, VBScript. Instructions on implementing the details of the method are plentiful and can be found among other places at the www-sites of the developers of the respective languages, and the NCSA-server of the developers of the CGI-interface.

Naturally, a competent professional in the industry can implement the method
based on the invention in ways not subsumed under the above description within the
20 restrictions set by the following claims.

Claims

1. A method for remote directing a www-browser. in which the controller. using his own www-browser (102), specifies via Internet an HTML-document for the browser of one or more listeners. being accessible to them trough their browsers (108), and to said controller trough his or her browser (101). to a program. which is a part of the method and is located in a server (100) accessible to said controller: said program controlling code containing files embedded onto the page (104); said controller instructing the listeners to choose said HTML-document. further specifying by means of his browser the address of the www-page (110) intended to be displayed in the window (107) of the page (104); and said address being further delivered to the server and to said program. which embeds said address of the page (110) onto the listener's page (104) wherein:

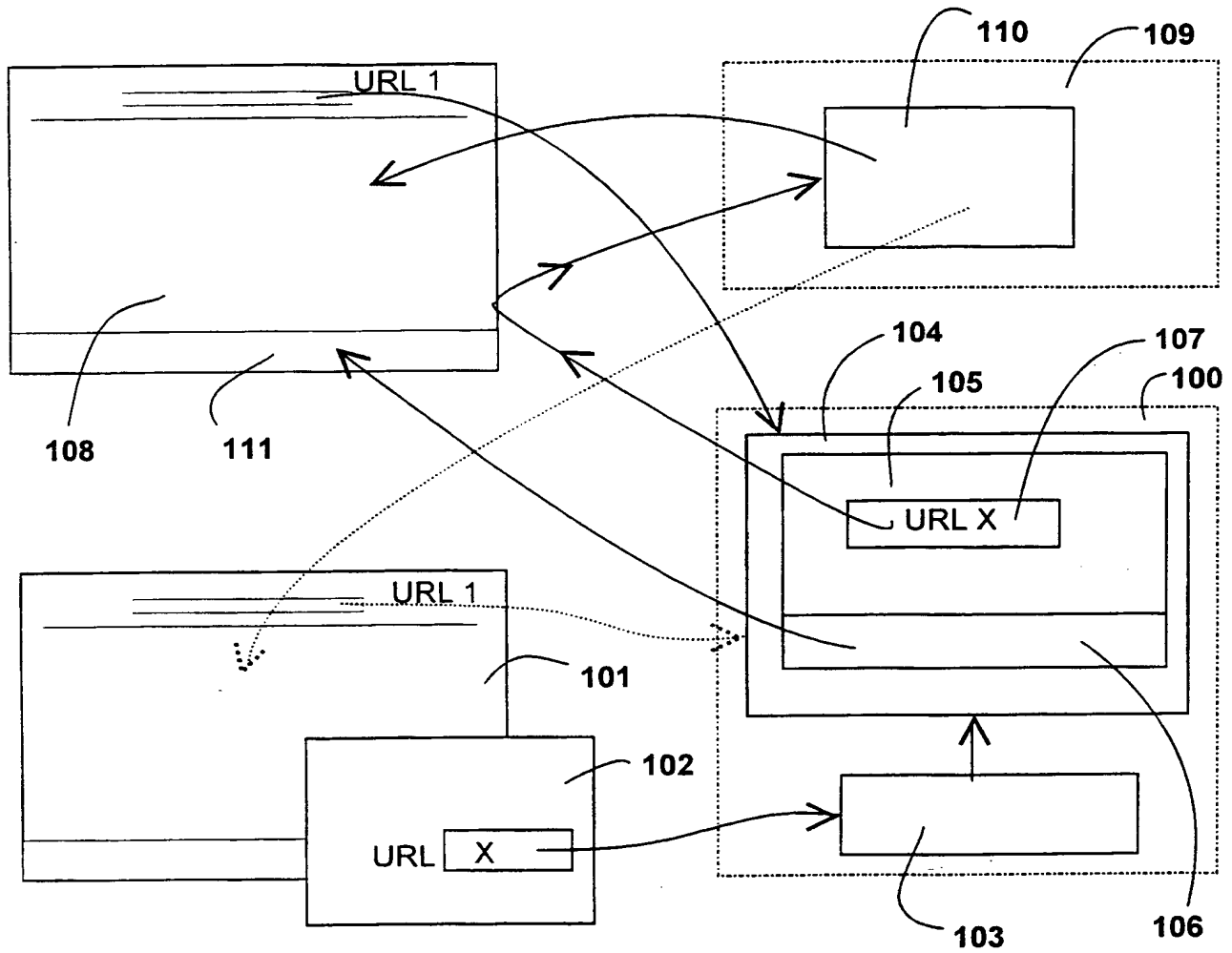
the listeners' page (104), upon being displayed by listeners' browsers (108), makes said browsers continuously check for possible changes in said documents in said controller's server. and finding the changes. refreshes the copy of the page (104) of said listener's browser to match said files at the server.

2. A method as claimed in claim 1 wherein the refreshing of the client's page (104) is conditioned by monitoring change in a parameter residing in the said server. changed by the program (103) upon a different www-address having been chosen. after which the copy of the page of the client's www-browser is refreshed.

3. A method as claimed in claim 1. wherein the controller can pick the address of the www-document displayed on the clients' www-browsers from a previously created list of www-addresses

4. A method as claimed in claim 1, 2, and 3 wherein the controller can choose the client allowed to access to the page (104) from a previously created list displayed on his or her www-browser.

1 / 2

**Fig. 1**

LIST OF URLS

- ☐ ...info/data.html
- ☐ ...info/picture1.htm
- ☐ ...www.firm.com
- ☐

URL

OK

102

201

202

Fig. 2

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A. CLASSIFICATION OF SUBJECT MATTER		
IPC7: H04L 12/18, H04M 11/06 According to International Patent Classification (IPC) or to both national classification and IPC		
B. FIELDS SEARCHED		
Minimum documentation searched (classification system followed by classification symbols)		
IPC7: H04M, H04L		
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Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
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X	EP 0847178 A2 (INTERNATIONAL BUSINESS MACHINES CORPORATION), 10 June 1998 (10.06.98), column 13, line 26 - column 14, line 42 --	1-4
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<input checked="" type="checkbox"/> Further documents are listed in the continuation of Box C. <input checked="" type="checkbox"/> See patent family annex.		
* Special categories of cited documents "A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier application or patent but published on or after the international filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the international filing date but later than the priority date claimed "I" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention "X" document of particular relevance: the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "Y" document of particular relevance: the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art "&" document member of the same patent family		
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P,A	US 5978828 A (P. GREER ET AL), 2 November 1999 (02.11.99), figure 10 --	1-2
E	WO 0045240 A2 (QUINTAS CORPORATION), 3 August 2000 (03.08.00), page 32, line 18 - line 31; page 24, line 6 - line 11 -----	1-2

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Patent document cited in search report			Publication date	Patent family member(s)		Publication date
WO	9813995	A1	02/04/98	AU	4315097 A	17/04/98
				EP	1008258 A	14/06/00
				GB	9620000 D	00/00/00
				GB	9620260 D	00/00/00
				GB	9705097 D	00/00/00
EP	0847178	A2	10/06/98	CA	2223845 A	06/06/98
				CN	1185071 A	17/06/98
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				US	5916302 A	29/06/99
WO	9836456	A1	20/08/98	AU	5995198 A	08/09/98
				EP	0962029 A	08/12/99
WO	9737484	A1	09/10/97	CA	2221702 A	09/10/97
				EP	0829160 A	18/03/98
				JP	11506595 T	08/06/99
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